



To: Economic & Technology Advancement Advisory Committee Members  
Re: Recommended Items for Final Report  
Fr: Carla Din, Western Regional Field Director, Apollo Alliance  
Date: August 14, 2007

There is huge potential for climate action to serve as an economic development strategy for California. If proper mechanisms are put into place, such as supportive policies and programs, Clean Tech will go beyond mere investing and create a new economy that has a rippling effect throughout the state. Engaging multiple stakeholders and leveraging California's technological, financial, and *human resources* will further the goal of making California a hub for Clean Tech activity at every level.

The following are recommendations that will “add value” to the CA Carbon Trust and the CA Low Carbon Manufacturing ideas proposed by E2C2 as well as recommendations for in-state offsets and a Clean Tech Workforce Training Program.

### **CA Carbon Trust**

Recommendation- expand criteria for grant funding so that it is based on enhancing greater economic development, in addition to meeting the Trust's requirement to reduce carbon levels in a cost-effective manner. Projects should be judged on their potential for promoting long-term sustainable economic and business growth in California. Metrics should be developed that measure positive social impacts, such as high quality job creation, in addition to environmental.

This approach would serve broader interests similar to CalPERS' Economically Targeted Investments (ETI), which are market rate investments that further the well being of Californians. ETI's provide competitive rates of return *while promoting growth and development of the national and regional economies*. They are designed to stimulate job creation, develop business, and increase the stock of affordable housing.

Additional incentives within the CA Carbon Trust should be made for projects that create jobs in the clean technology sector and provide:

- Prevailing wage & adequate health benefits coverage
- Ties to state-approved apprenticeship programs
- Local-hire commitment, county-wide

- Job preparation training in coordination with community-based job training programs
- Commitment to safe & healthy work environments.

#### Project Recommendations for Funding:

- Funding for a feasibility study (carried out by either ARB or CEC) to establish a market for alternative fuels that are made and produced within the State of California. The closer the feedstock is grown and the closer the fuel produced to the final consumption of renewable fuel, the greater the environmental benefits and employment opportunities to Californians.

The feasibility study would measure and compare all diesel and renewable diesel feedstocks and technologies on a full fuel lifecycle basis, including the complete environmental and economic impacts of oil seed feedstock related to growing, oil extraction, and producing, blending, transporting and/or importing biodiesel fuels into California. The analysis shall specify what percentage of fuels can be minimally produced in a cost-effective and technological feasible way as to produce the highest target of in-state feedstock and fuel production levels of sustainable renewable diesel fuels.

- Up-front capital costs for equipment upgrades, such as Compressed Air System Improvements for the Cement Industry, which offers significant savings opportunities, requires minimal capital costs and short payback periods. This will reduce emissions in a cost-effective manner, help make the company more competitive and preserve jobs in California.

### **Establish the Clean Technology Workforce Training Program**

The research, development, deployment, and commercialization of advanced clean technologies in California will result in new occupational demands across industries.

The Clean Technology Workforce Training Program will encourage the creation and retention of in-state jobs in Clean Tech by supporting, creating and coordinating training efforts tailored to the needs of new and existing businesses by sector. Training programs must be employer-driven and reflect true workplace needs.

A properly designed and executed **Clean Tech Workforce Training Program** in California will lead to:

- Business-government-labor partnerships that support ongoing skill development and quality employment opportunities to meet future workplace needs and keep companies competitive.
- Curriculum development in related fields that will train students and working people, prepare them to serve the growing labor market in the emerging energy sectors, and steer them to meaningful, career oriented jobs.
- Long-term job retention and job growth where jobs are needed the most.
- Skilled and available labor pools to attract new businesses.
- Skills upgrading & recruiting, apprenticeship opportunities, and expansion of high-quality employment.

- Increased public and private investments.

**The Clean Technology Workforce Training Program** will coordinate appropriate state agencies and departments, private and non-profit entities to:

- Assess anticipated technological changes and workforce and training needs in advanced energy-related fields, from transportation to energy-intensive industrial sectors at all skill levels. Identify new processes, equipment, products and systems coming on line and the new skill sets required to meet the demands of the fields.
- Coordinate with relevant workforce agencies to prioritize public and private training funding in high-growth sectors.
- Inventory existing clean tech workforce programs in the state, from community college based vocational programs such as HVAC & Energy Management Technician Programs; to Apprenticeship & Training Programs with the Building Trades, and create a comprehensive database.
- Identify gaps for training in emerging Clean Tech sectors.
- Identify existing training funding (e.g. Economic Training Panel and Workforce Investment Board) that could support Clean Tech workforce development.
- Promote skilled trades in related fields to help make the transition in upgraded energy sectors. Encourage resource-sharing and best practice models.

**Workforce Training Fund** will be funded through the CA Carbon Trust.

- Five million dollars per year for two years (\$10 million total) to support pilot projects and to leverage additional public and private educational resource dollars.
- The Fund will award ten 2-year projects, with awardees receiving \$500,000 in year 1, and \$500,000 in year 2. Year 2 is contingent on successful year 1 performance, with measurable results.
- The Fund, administered by the CA Labor and Workforce Development Agency, will be used to issue grants through an RFP process. Funds should target broad-based partnerships with employers, labor unions, training providers and workforce and economic development agencies.
- In coordination with the State Workforce Investment Board (WIB), a panel of experts will develop priorities, principles and criteria, and require accountability. Panel makeup will include employers, labor representatives, training program providers and workforce and economic development agencies.
- The Employment Development Department (EDD) will develop and manage the RFP process and track performance.

The best candidates for funding will include the following elements:

1. Broad coalitions that include labor-management training partnerships (including union apprenticeship); employers and/or industry groups; unions and/or labor organizations;

community college districts; local Workforce Investment Boards; community organizations; CSU and/or UC; and foundations.

2. One hundred percent matching in-kind donations and/or cash.
3. Demonstrated history of successful partnership and/or work in industry sector
4. Clear plan for establishment of career ladders -- recruitment and training of new hires, incumbent worker training, and pathways to life-long education and training
5. Demonstration of employment self-sufficiency with future wage progression.

## **Offsets**

Offset projects that reduce greenhouse gas emissions should be limited as a compliance option for environmental and economic reasons. If offsets are allowed, they should be limited to the geographic area of California in order to bring about greater social equity by stimulating job creation and addressing environmental justice.

In-state offsets would help drive economic development in the state by pushing for technological solutions leading to permanent reductions in California. This would provide greater certainty for investors and therefore attract greater investments to the state, spur innovation, and stimulate business and job growth for Californians. Direct benefits would provide the greatest public health benefits to those living in areas with the lowest air quality standards and bring about greater environmental justice.

*Out-of state* allowances would jeopardize construction jobs involved in modernizing industrial facilities. Additionally, new Clean Tech jobs would be at risk if compliance is so lenient that overly cheap allowances can be purchased.

## **California Clean Tech Manufacturing Attraction Program**

Utilizing its pioneering technologies, skilled labor pool, and academic research centers, California has the potential to become the green manufacturing center in the West. These assets could help create new market opportunities in California and offer leading edge strategies to remain globally competitive & productive as well as restore some of the lost manufacturing in the state over the last decade.

There are barriers. Decisions on where to build manufacturing facilities are especially sensitive to tax policies and capital costs, which is less true for R&D. According to the National Policy Research Council, only one large county in California made the top 20 list for Recruitment & Attraction of businesses. (CA- Yolo County).

Recommendation: In conjunction with the Low Carbon Manufacturing program, develop an aggressive **Clean Tech Manufacturing Attraction Program in California** that proactively courts Clean Tech manufacturers to California and creates strategies to keep companies in-state.

- Coordinate with relevant public and private sector parties including the CA State Business Transportation and Housing Agency, CA Labor Federation and the CA Manufacturers and Technology Association.

- Identify barriers to in-state manufacturing and in-state business attraction and retention.
- Identify public and private incentives for in-state manufacturing, including rebates, production incentives, tax credits.
- Develop a set of recommendations for additional incentives that may include tax reform, tax incentives for up-front capital costs, state tax credits for businesses that use renewable energy, expedited permitting, land use.
- Create strategies for avoiding the loss of valuable manufacturing facilities to other states, such as Tesla Motors, which is building its new automobile assembly in NM.
- Analyze effectiveness of other state policies to increase in-state manufacturing, such as Pennsylvania’s successful efforts to attract Gamesa Wind Energy company to Pennsylvania
- Highlight and market CA’s manufacturing strengths through an outreach program to domestic and international Clean Tech companies. Include the state’s access to transportation systems (port, rail), financial incentives, strong regulations, workforce training programs, public policies supporting continued growth, state’s commitment (to product), industrial land, technological expertise, local suppliers, access to higher education research and development, the manufacturer’s investment tax credit, identification of local lenders, quality of life and assistance from the **Clean Tech Workforce Training Program**.
- Highlight benefits of green manufacturing clusters, including resource sharing, strategies for getting established through land use and permitting, publicly-funded training, economic trend information, energy efficiency strategies, information about financial services, supplier access.
- Identify existing manufacturing in California that has the potential to take companies to the next level and offer the necessary support mechanisms, e.g. in-state hybrid car manufacturing at Fremont’s NUMMI plant and PHEV car manufacturing.

#### Recommendation to CA Low Carbon Manufacturing Program

For both the California “Carbon Star” certification and the “Buy California Campaign,” additional incentives should be made for manufacturers that create jobs in the clean technology sector and provide:

- Prevailing wage & adequate health benefits coverage
- Ties to state-approved apprenticeship programs
- Local-hire commitment, county-wide
- Job preparation training in coordination with community-based job training programs
- Commitment to safe & healthy work environments.

Contact: Carla Din, [din@apolloalliance.org](mailto:din@apolloalliance.org); (510) 336-3311